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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,818	04/30/2001	Kristian Vaajala	944-003.031	2309
4955	7590	12/02/2004	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP				PESIN, BORIS M
BRADFORD GREEN BUILDING 5				ART UNIT
755 MAIN STREET, P O BOX 224				2174
MONROE, CT 06468				PAPER NUMBER
DATE MAILED: 12/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/845,818	VAAJALA ET AL.	
	Examiner Boris Pesin	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 01 July 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-3, 5-21, 23-35, 37-51, 53-83 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3,5-21,23-35,37-51 and 53-83 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Response to Amendment***

This communication is responsive to Amendment A, filed 07/01/2004.

Claims 1-3, 5-21, 23-35, 37-51, 53-83 are pending in this application. Claims 1, 8, 12, 14, 18, 21, 26, 30, 33, 40, 42, 44, 48, 51, 56, 60 are independent claims. In the Amendment A, Claims 1, 5, 6, 7, 8, 12, 14, 18, 19, 20, 21, 23, 24, 25, 26, 30, 33, 37, 38, 39, 40, 42, 44, 48, 51, 56, 57, 59, and 60 were amended. Furthermore, Claims 63 – 83 were added as new. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

Claims 1-3, 5, 7-9, 12-17, 21, 23, 25-29, 33-35, 37, 39-47, 51, 53, 55-59, and 77-83 are rejected under 35 U.S.C. 102(b) as being anticipated by Hedberg (WO 99/32960 A1).

As per independent claim 1, Hedberg teaches a method for displaying graphical information on a display of an electronic device sized for hand-held use (page 5, lines 20-24), said display providing an image in a window having an extent limited by the size of the electronic device, comprising the steps of: receiving an input windowing signal in response to a user of said electronic device actuating one or more finger actuatable user input devices associated with said electronic device to select a window (Page 6,

Line 33), said windowing signal having a magnitude indicative of a selected whole or portion of an extent of said graphical information greater than displayable at once as said image over said limited extent of said window (page 4, lines 3-9, *i.e. – different magnification or different parts*), and displaying said selected whole or portion of said extent of said graphical information on said limited extent window, in response to said user actuated input windowing signal (page 4, lines 10-21).

As per claim 2, which is dependent on claim 1, Hedberg teaches that the graphical information has a given resolution available over said extent of said graphical information and wherein said step of displaying said whole or portion of said extent of said graphical information is at a resolution less than or equal to said given resolution (page 6, lines 14-22, *the hand-held display device shows graphical information at a lower resolution than original graphical information*).

As per claim 3, which is dependent on claim 1, Hedberg teaches the steps of: receiving an input zoom signal actuated by said user of said electronic device, said input zoom signal having a magnitude indicative of a selected level of resolution, wherein said graphical information has a given resolution available over said extent of said graphical information greater than displayable at once in said window, and displaying said selected level of resolution over a portion of said extent of said graphical information (page 6-7, lines 33-6).

As per claim 5, which is dependent on claim 1, Hedberg teaches a method wherein said one or more finger-actuatable user input devices includes one or more buttons or keys (page 6, line 34).

As per claim 7, which is dependent on claim 1, Hedberg teaches a method wherein said one or more finger-actuatable user input devices includes one or more joysticks (page 1, lines 15-23).

As per independent claim 8, Hedberg teaches a method for displaying graphical information on a display of an electronic device sized for hand-held use (page 5, lines 20-24), said display providing an image in a window having an extent limited by the size of the electronic device, comprising the steps of: receiving an input windowing signal in response to a user of said electronic device actuating one or more finger actuatable user input devices associated with said electronic device to select a window (Page 6, Line 33), said windowing signal having a magnitude indicative of a selected whole or portion of an extent of said graphical information greater than displayable at once as said image over said limited extent of said window (page 4, lines 3-9, *i.e. – different magnification or different parts*), and displaying said selected whole or portion of said extent of said graphical information on said limited extent window, in response to said user actuated input windowing signal (page 4, lines 10-21); wherein said input windowing signal is provided with said magnitude indicative of both translational and rotational degrees of freedom in response to said user moving said electronic device with said both translational and rotational degrees of freedom (page 4, lines 3-9).

As per claim 9, which is dependent on claim 8, Hedberg teaches that said moving includes moving said device with changing velocity (page 4, lines 3-9, *a force accelerometer measures changing velocity*).

As per claim independent claim 12, Hedberg teaches a method for displaying graphical information on a display of an electronic device sized for hand-held use (page 5, lines 20-24), said display providing an image in a window having an extent limited by the size of the electronic device, comprising the steps of: receiving an input windowing signal in response to a user of said electronic device actuating one or more finger actuatable user input devices associated with said electronic device to select a window (Page 6, Line 33), said windowing signal having a magnitude indicative of a selected whole or portion of an extent of said graphical information greater than displayable at once as said image over said limited extent of said window (page 4, lines 3-9, i.e. – *different magnification or different parts*), and displaying said selected whole or portion of said extent of said graphical information on said limited extent window, in response to said user actuated input windowing signal (page 4, lines 10-21); wherein said graphical information has a given resolution available over said extent of said graphical information and wherein said step of displaying said whole or portion of said extent of said graphical information is at a resolution less than or equal to said given resolution (Figure 2, Elements 7 and 8); wherein said input windowing signal is provided with said magnitude indicative of both translational and rotational degrees of freedom in response to said user moving said electronic device with said both translational and rotational degrees of freedom (page 4, lines 3-9).

As per claim 13, which is dependent on claim 12, Hedberg teaches that the moving includes moving said device with changing velocity (page 4, lines 3-9, *a force accelerometer measures changing velocity*).

As per claim independent claim 14, Hedberg teaches a method for displaying graphical information on a display of an electronic device sized for hand-held use (page 5, lines 20-24), said display providing an image in a window having an extent limited by the size of the electronic device, comprising the steps of: receiving an input windowing signal in response to a user of said electronic device actuating one or more finger actuatable user input devices associated with said electronic device to select a window (Page 6, Line 33), said windowing signal having a magnitude indicative of a selected whole or portion of an extent of said graphical information greater than displayable at once as said image over said limited extent of said window (page 4, lines 3-9, i.e. – *different magnification or different parts*), and displaying said selected whole or portion of said extent of said graphical information on said limited extent window, in response to said user actuated input windowing signal (page 4, lines 10-21); receiving an input zoom signal actuated by said user of said electronic device, said input zoom signal having a magnitude indicative of a selected level of resolution, wherein said graphical information has a given resolution available over said extent of said graphical information greater than displayable at once in a window (pages 6-7, lines 33-6), and displaying said selected level of resolution over a portion of said extent of said graphical information (pages 6-7, lines 33-6); and wherein said input windowing signal is provided with said magnitude indicative of both translational and rotational degrees of freedom in response to said user moving said electronic device with said both translational and rotational degrees of freedom (page 4, lines 3-9).

As per claim 15, which is dependent on claim 14, Hedberg teaches that the moving includes moving said device with changing velocity (page 4, lines 3-9, *a force accelerometer measures changing velocity*).

As per claim 16, which is dependent on claim 1, Hedberg teaches the step of displaying a stationary pointer on said limited extent window for use in selecting a link in its vicinity (page 7, lines 20-29).

As per claim 17, which is dependent on claim 16, Hedberg teaches the step of receiving a user entered link selection signal for said selecting a link (page 7, lines 20-29, *i.e. – “under” a fixed pointer*).

As per independent claim 21, Hedberg teaches a method for displaying graphical information on a limited extent display of a hand-holdable electronic device (page 5, lines 20-24), comprising the steps of: receiving inputs actuated by a user to indicate various selected levels of detail, wherein said graphical information has a level of detail over an extent greater than displayable at said level of detail over said limited extent display with a greatest level of detail available in said display (page 3, lines 27-31), and displaying said graphical information, in response to said inputs actuated by said user, in said various selected levels of detail over an increasingly lesser extent of said extent of said graphical information with increasingly greater levels of detail of said graphical information (page 6-7, lines 33-6, *i.e. – zooming in*); wherein said inputs by said user comprise actuation of a finger-actuatable control device associated with said hand-holdable electronic device (Page 6, Line 33).

As per claim 77, it is inherent in Hedberg that there is a computer program stored on a computer readable medium for carrying out the steps of claim 1.

Claim 23 is similar in scope to claim 5, and is therefore rejected under similar rationale.

Claims 25-29 are similar in scope to claims 7, 8, 9, 16, and 17, respectively, and are therefore rejected under similar rationale.

Claims 33-35, and 37 are similar in scope to claims 1, 2, 3, and 5, respectively, and are therefore rejected under similar rationale.

Claims 39-47 are similar in scope to claims 7, 8, 9, 12, 13, 14, 15, 16, and 17, respectively, and are therefore rejected under similar rationale.

Claim 51 is similar in scope to claim 21, and is therefore rejected under similar rationale.

Claim 53 is similar in scope to claim 5, and is therefore rejected under similar rationale.

Claims 55-59 are similar in scope to claims 7, 8, 9, 16, and 17, respectively, and are therefore rejected under similar rationale.

Claims 78-83 are similar in scope to claim 77, and are therefore rejected under similar rationale.

Claims 6, 24, 38, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedberg (WO 99/32960 A1) and further in view of Masunaga (US 5563631).

As per claim 6, which is dependent on claim 1, the teachings of Hedberg in regards to claim 1 have been discussed above. Hedberg does not disclose one or more finger-actuatable user input devices includes plural finger-actuatable rollers.

Masunaga teaches a method wherein one or more finger-actuatable user input devices includes plural finger-actuatable rollers (column 9, lines 43-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hedberg to include a finger-actuatable roller devices to provide input, as taught by Masunaga, with the motivation to allow a simple and effective control of small personal digital devices (column 2, line 10).

Claims 24, 38, and 54 are similar in scope to claim 6, and are therefore rejected under similar rationale.

Claims 10, 63, 65, 67, 69, 71, 73, and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedberg (WO 99/32960 A1) and further in view of Sypniewski (US006054951A).

As per claim 10, which is dependent on claim 8, the teachings of Hedberg in regards to claim 8 have been discussed above. Hedberg does not disclose that the moving includes moving said device with respect to a magnetic field.

Sypniewski teaches that the moving includes moving said device with respect to a magnetic field (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hedberg with a means to detect movement of a hand-held device with respect to a magnetic field, as taught by Sypniewski, with the motivation to more quickly determine the location and movement of a device (column 2, lines 42-43).

Claims 63, 65, 67, 69, 71, 73, and 75 are similar in scope to claim 10, and are therefore rejected under similar rationale.

Claims 11, 64, 66, 68, 70, 72, 74, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedberg (WO 99/32960 A1) and further in view of Flack et al. (US 6288704).

In regards to claim 11, Hedberg teaches all the limitations of claim 8. Hedberg does not teach a method wherein said moving includes moving with respect to sensible objects. Flack teaches that the moving includes moving with respect to sensible objects (column 4, lines 14-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Hedberg with the teachings of Flack and include a method of moving with respect to sensible objects with the motivation to provide simple and convenient method to control the display contents (Flack, Column 3, Line 30).

Claims 64, 66, 68, 70, 72, 74, and 76 are similar in scope to claim 11, and are therefore rejected under similar rationale.

Claims 18, 19, 20, 30, 31, 32, 48, 49, 50, 60, 61, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedberg (WO 99/32960 A1) in view of Microsoft Word (2000) Screen Shots.

As per claim 18, Hedberg teaches a method for displaying graphical information on a display of an electronic device sized for hand-held use (page 5, lines 20-24), said display providing an image in a window having an extent limited by the size of the electronic device, comprising the steps of: receiving an input windowing signal in response to a user of said electronic device actuating one or more finger actuatable user input devices associated with said electronic device to select a window (Page 6, Line 33), said windowing signal having a magnitude indicative of a selected whole or portion of an extent of said graphical information greater than displayable at once as said image over said limited extent of said window (page 4, lines 3-9, *i.e. – different magnification or different parts*), and displaying said selected whole or portion of said extent of said graphical information on said limited extent window, in response to said user actuated input windowing signal (page 4, lines 10-21). Hedberg does not explicitly disclose a method further comprising the step of displaying a stationary pointer on said limited extent window for use in selecting a link in its vicinity, and the step of changing a color or shape of said stationary pointer when in said vicinity of said link. Word 2000 teaches displaying a stationary pointer on limited window for use in selecting a link (See Figures 1-3) and displaying the color or shape of said stationary pointer when in the vicinity of a link. Therefore, it would have been obvious to one of ordinary skill in the art

at the time the invention was made to modify the teachings of Hedberg with the teachings of Word and include a means to change the color or shape of a pointer when in the vicinity of a link with the motivation to indicate to the user when it is possible to select and activate the link.

Claims 30, 48, and 60 are similar in scope to claim 18, and are therefore rejected under similar rationale.

As per claim 19, which is dependent on claim 16, Hedberg teaches the that the step of displaying is carried out only when link is positioned in said vicinity of said stationary pointer (page 7, lines 20-29).

As per claim 20, which is dependent on claim 16, Hedberg teaches that the stationary pointer is positioned in a central position within said limited extent window (page 7, lines 20-29, and figure 6, element 15, *pointer is positioned in the center of the display*).

Claims 31-32, 49-50, and 61-62 are similar in scope to claims 19 and 20 respectively, and are therefore rejected under similar rationale.

### ***Response to Arguments***

Applicant's arguments with respect to claims 6, 24, 38, and 54 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 7/01/2004 have been fully considered but they are not persuasive.

The applicant argues:

- a. The only buttons that Hedberg shows are not for the purpose of enabling the motion-based sensing.
- b. Changing the color or shape of a pointer when in the vicinity of a link, when the link is being moved under the pointer, is not well known in the art.  
*KK*
- c. No motivation to combine Hedberg and Sypniewski.

In regards to argument (a), Hedberg clearly teaches buttons that are for the purpose of enabling the motion-based sensing. Hedberg teaches, "By activation of said display device 1 by pressing said activation control button 3 and then moving said display back and forth...". The button is used to enable motion based sensing.

In regards to argument (b), the Examiner provided a reference of Microsoft Word where it is notoriously well known to move a link under a pointer and the shape of the pointer changes (See Figures 1-3)

In regards to argument (c), the Examiner clearly provided motivation to combine the references and even cited the motivation used in the prior office action. The motivation stated in the prior office action and in the current action is "to more quickly determine the location and movement of a device (column 2, lines 42-43)".

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070. The examiner can normally be reached on Monday-Friday, 9-6, except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*Kristine Kincaid*  
KRISTINE KINCAID  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100